MORTGAGE MARKET TRENDS

Volume 4
Issue 1
June 2000

WHAT ABOUT SUBPRIME MORTGAGES?

Research & Analysis
Office of Thrift Supervision
Washington, DC

INTRODUCTION•

To the battle-scarred prime mortgage lenders who survived the oil patch disaster of the mid 1980s and the recession in the early 1990s, lending money to borrowers with poor or non-existent credit histories might seem like a bad idea. But it is an idea whose time has come. According to the Mortgage Bankers Association, B&C mortgage originations[1] have risen from $86.4 billion in 1994 (11.2% of all home mortgage originations in that year) to $190 billion (14.8% of the total) in 1999.

Technological advances in financial markets have enabled lenders to gather, analyze, and process more timely and accurate credit information. Lenders can now assess the risk and return of each loan more efficiently than ever before. They can increase the likelihood of repayment of higher risk loans with sophisticated monitoring tools. As a result, lenders have made billions of dollars in additional credit available to families that had previously faced very limited credit opportunities for buying a home.

This rapid growth has not been without its casualties and controversies. Two recent well-publicized bank failures have been attributed to unsound subprime lending, although neither involved subprime first mortgages. And the market break of late 1998 led to the demise of a number of non-depository high loan-to-value lenders—close cousins of subprime lenders. As a result of these and other subprime lending losses, in March 1999, the bank regulators issued detailed guidance on managing subprime lending programs. More recently, the agencies have been considering whether specific increased capital requirements are appropriate.

OTS recently issued an Advanced Notice of Proposed Rulemaking (ANPR) on responsible alternative mortgage lending. The ANPR specifically identified subprime lending as an area of concern. OTS has generally taken a market-based approach to regulating the lending of its institutions, emphasizing full disclosure of terms and conditions, and letting consumers negotiate their best deal. However, OTS is questioning whether some subprime borrowers have access to the same information and options as borrowers in the traditional prime mortgage market, and as a result may not be in a position to negotiate effectively for themselves.

The subprime mortgage market thus presents an interesting conundrum. For most subprime borrowers and lenders, the market is a safe way to make sorely needed credit available at a return commensurate with the risk undertaken. Yet, there is a dark side. Some see subprime

• Prepared by Fred Phillips-Patrick, Eric Hirschhorn, Jonathan Jones, and John LaRocca, Research & Analysis, Office of Thrift Supervision. Please email any comments or questions to fred.patrick@ots.treas.gov.

[1] B&C refers to credit quality. Prime mortgages are rated 'A'. The volume cited includes first and second mortgages and home equity lines of credit.

lending as a predatory market, with lenders making excessive profits at the expense of unwary borrowers. Others see it as a high-risk activity, exposing lenders to excessive losses, not excessive profits. Anecdotes support both contentions. However, the empirical data we've found suggest that the subprime market overall is a well-functioning, competitive market. The data will also show , though, that subprime loans are definitely not just prime loans with higher coupon rates. In this issue of *Mortgage Market Trends*, we will look at some characteristics of the subprime loans–composition, rates, and delinquency patterns, among others—as an introduction to this complex and rapidly changing market.

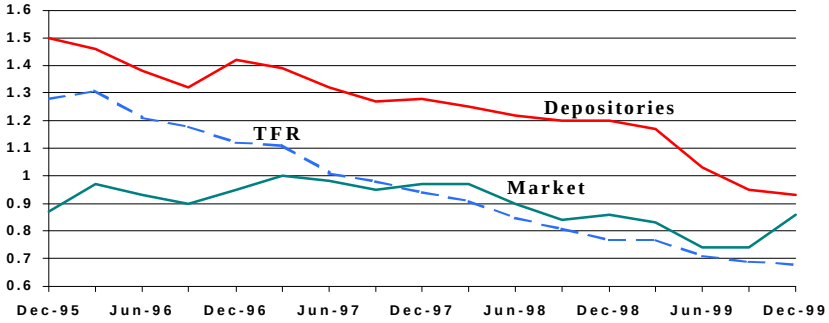
Before we get started, let's look at mortgage market conditions over the last half of 1999.

CURRENT MORTGAGE MARKET CONDITIONS

Thrift Delinquency Rates Continue To Decline

Figure 1 plots the percentage of seriously delinquent (90 days past-due or in foreclosure) residential mortgages, using both the Mortgage Information Corporation (MIC) prime mortgage data and Thrift Financial Report (TFR) data. The MIC prime mortgage data comprise almost 26 million mortgages. Since the first issue of the *Mortgage Market Trends*, we have divided the MIC data into two groups: the market, which includes all MIC participants (Freddie Mac, Fannie

Figure 1: Percent Seriously Delinquent



Source: MIC and TFR. The *Market* contains the combined data of the depository and non-depository participants in MIC's Loan Performance System. *Depositories* comprise both bank and thrift MIC participants. The thrift MIC participants are very large institutions located primarily on the East and West coasts. *TFR* represents all OTS-regulated institutions except one that specializes in defaulted mortgages.

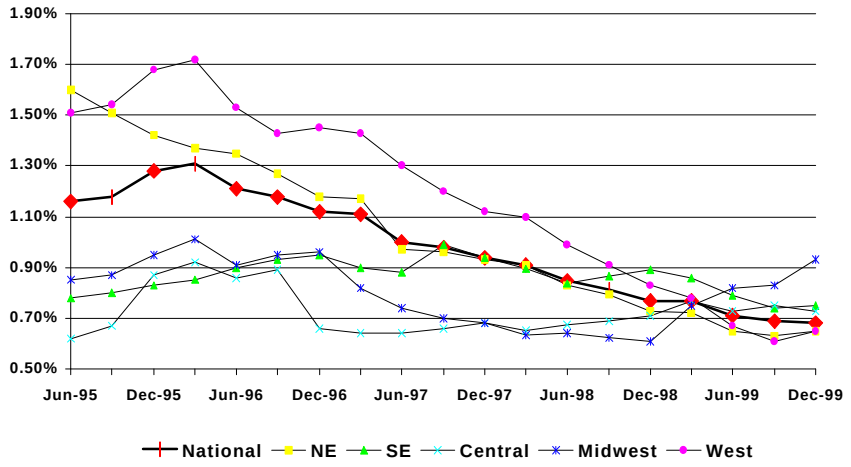
Mae, and 18 other large banks, thrifts, and private mortgage lenders), and a subgroup, depository institutions, which includes only the FDIC-insured MIC participants (a mix of S&Ls and commercial banks). As the trend lines in Figure 1 show, depository and TFR delinquency rates have fallen since the end of 1998, continuing a long-term trend. However, the MIC market delinquency rate rose during the second half of 1999, bringing it back to where it was at the end of 1998. Slightly higher delinquency rates among fixed-rate conventional mortgages and the

continuing rise in delinquency rates among government-backed mortgages contributed to its rise.

Figure 1 also shows that depositories, as a group, have had a higher delinquency rate than the national average for the entire period. The gap between the depository and the market delinquency rates remained fairly constant until the second half of this past year, when it narrowed because of a rise in the market rate. The thrift industry's delinquency rate has declined steadily and since 1997 has dropped **below** the MIC market rate, which is heavily influenced by the portfolios of conforming mortgages held by Fannie Mae and Freddie Mac.

Figure 2 shows the regional detail behind the improvement in the overall delinquency rate for TFR reporters. Thrifts headquartered within OTS's Northeast and West regions showed a small increase in delinquencies, but share the distinction of having the best performance among the regions. The Midwest region's performance has steadily deteriorated over the last year, going from best performance to worst. All regions, however, continue to have very low rates.

Figure 2: Regional Delinquency Rates Among TFR Reporters



Maryland, DC, and Hawaii Have Highest Delinquency Rates

In December 1999, according to the MIC data, the states with the highest rates of seriously delinquent prime mortgages (by dollar value) were Maryland (1.81%), the District of Columbia (1.62%), Hawaii (1.59%), New York (1.46%), and New Jersey (1.41%). The national average was 0.86%. California, which has previously drawn national attention because of its poor performance, had a rate of 0.79%, below the national average. Iowa (0.29%) and Nebraska (0.25%) had the lowest rates.

In individual metropolitan statistical areas (MSAs), Memphis, TN, with a seriously delinquent rate of 2.25%, led the nation. It was followed by Riverside, CA (2.08%), and Scranton, PA (1.89%). Among major markets, Miami was fifth worst, with a rate of 1.81%. New York was

twelfth with a rate of 1.50%. The San Francisco metropolitan area, with a rate of 0.16%, had the lowest seriously delinquent rate in the nation.

Table 1 shows the percentage of mortgages that are seriously delinquent for different product types (conventional and government-backed, fixed-rate and adjustable-rate) based on whether the mortgages were made for purchase or for refinancing. These data show that fixed-rate mortgages outperform adjustable-rate mortgages and 15-year fixed-rate mortgages outperform 30-year fixed-rate mortgages. Refinanced mortgages perform much better than home purchase mortgages in all cases.

Table 1: Percent Seriously Delinquent

	Home Purchase	Refi
Conv: Fixed Rate	0.51	0.25
15-Yr Fixed	0.16	0.11
30-Yr Fixed	0.56	0.31
Conv: Adj Rate	0.79	0.69
T-Bill	0.72	0.64
COFI	1.01	1.01
Government	3.95	2.04
FHA	4.19	1.91
VA	3.26	2.30
All Loans	1.10	0.38

Source: MIC, based on $ amounts, 12/99

Delinquency rates on government-backed loans substantially exceed those on conventional loans. For home purchase mortgages, government-backed loans have a seriously delinquent rate seven times higher than that for 30-year conventional loans (3.95 vs. 0.56); for refinancing loans, the rate is 6.6 times higher (2.04 vs. 0.31).

Figure 3: Percent Seriously Delinquent, Government-backed and Conventional Home Purchase Mortgages, 1993-1999 (Source: MIC)

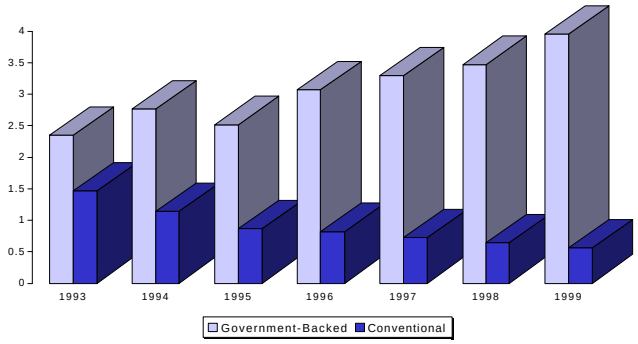


Figure 3 presents a tale of two series, the performance of government-backed and conventional home purchase mortgages, over the last six years. The performance of government-backed mortgages (FHA and VA) becomes worse year-by-year. Four percent of the government-backed loans tracked by MIC are currently seriously delinquent. The

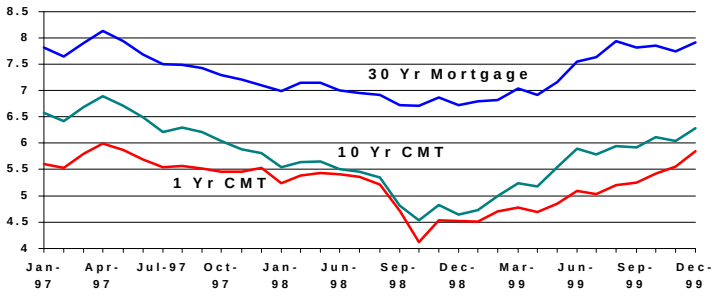
performance of conventional mortgages improves year-by-year. Currently only about one-half of a percent of conventional mortgages are seriously delinquent. The spread between the two grows ever wider.

Interest Rates Rise Rapidly

Interest rates rose quickly and sharply from their seven-year lows in October 1998 through the end of 1999. Figure 4 depicts the movement of key interest rates since January 1997.

The one-year constant maturity Treasury rate (1 Yr CMT) is frequently used as an index for adjustable-rate mortgages. The ten-year constant maturity Treasury rate (10 Yr CMT) serves as an overall risk-free reference rate for longer-term contracts. The FHLMC 30-day commitment rate for 30-year fixed-rate conforming mortgages provides a commonly used mortgage interest rate benchmark.

Figure 4: Interest Rates Since January 1997



During the period July through October 1998, domestic and worldwide events prompted a flight to safety that drove Treasury rates down sharply. Mortgage rates also fell, but not nearly as much. The rates rose in November 1998, declined slightly in December 1998, but have climbed steadily since then.

The rapid decline in interest rates in 1998 prompted many homeowners to refinance into fixed-rate mortgages, especially in the second half of the year. But since the beginning of 1999, the rapid rise in rates, especially long-term rates, has made adjustable-rate mortgages much more attractive. In December 1999, the Federal Housing Finance Board's *Mortgage Interest Rates Survey* shows that 78% of all mortgages originated by savings associations in that month were adjustable-rate. In contrast, as recently as February 1999, the percentage was only 36%.

SUBPRIME MORTGAGES

This section describes some data on subprime mortgages OTS has obtained from the Mortgage Information Corporation. MIC's subprime mortgage system is a relatively new product and it is not yet as inclusive as their prime mortgage data. MIC's subprime mortgage data include 1.8 million loans, with an aggregate value

of $112 billion. This compares to MIC's prime loan data that include 26.6 million loans with an aggregate value of more than $2.6 trillion. The subprime data come from 27 lenders. The subprime data are as of September 1999.

The MIC Subprime Mortgage Database

MIC's subprime data are not as nationally representative as their prime mortgage portfolio data. These differences reflect the narrower range of lenders in the subprime data, and the varying amounts of subprime lending across the country. The subprime data show no loans in ten states: Alabama, Alaska, Louisiana, New Hampshire, North Carolina, North Dakota, Oklahoma, South Carolina, Tennessee, and Texas. The absence of subprime loans in Texas may reflect that state's long-standing prohibition of home equity lending, which ended only recently.

Figure 5 shows the differences in the relative shares of prime and subprime loans across states. For example, California has 16.4% of all prime mortgages in the MIC database but only 12.2% of the subprime mortgages. Therefore, the figure shows California with a positive difference of 4.2%. The most notable differences are the relative under-representation of subprime loans in Texas, California, and North Carolina and the over-representation of subprime loans in Ohio, Florida, Indiana, Pennsylvania, and Michigan.

Figure 5: Differences in the State-By-State Relative Shares of Prime and Subprime Mortgages

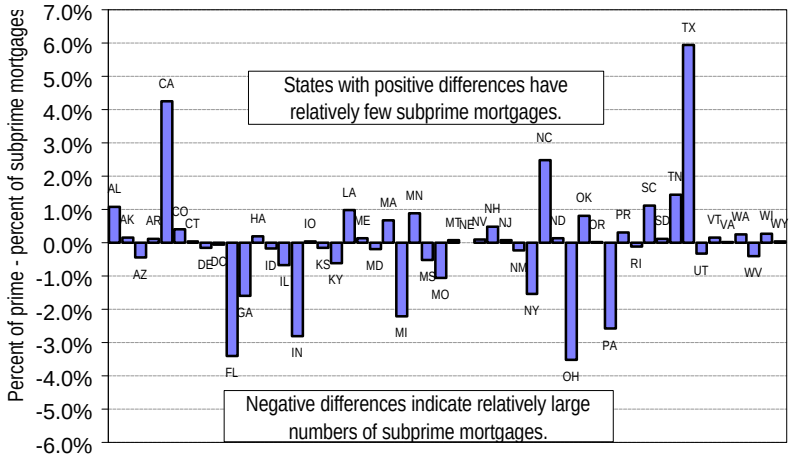


Table 2 shows the distribution of the MIC subprime loans by their origination year compared to MIC's prime mortgages. The subprime loans are of much more recent vintage than the prime loans. Over two-thirds of the subprime mortgages were originated in 1998 or 1999, compared to half of the prime loans. Less than seven percent of the subprime mortgages were originated in 1995 or earlier, compared to about one-third of the prime loans.

The more "youthful" characteristic of the subprime mortgage portfolio is due in part to the subprime market's more recent development. It

Table 2: Distribution of Subprime and Prime Mortgages by Origination Years (By $ Volume)

	Subprime Mortgages	Prime Mortgages
1999	33.3%	19.2%
1998	36.2%	30.8%
1997	16.6%	10.0%
1996	7.1%	7.3%
1995	2.8%	5.2%
1994	1.6%	5.5%
1993	0.9%	11.9%
Pre-1993	1.6%	10.2%

also reflects a basic difference between subprime and prime loans. Subprime loans have higher prepayment rates than prime loans because their prepayments are driven by more factors than prime mortgages. Prime mortgage prepayments are largely determined by housing turnover and market interest rates declines that give borrowers a chance to refinance at lower rates. Subprime mortgages prepay not only because of these factors but also when borrowers have built up sufficient credit history or home equity to "move up" to higher quality or prime mortgages.

Table 3: Distribution of Subprime Loans by Paper Grade

	By Dollar Value		By Number of Loans	
	$Millions	Percent of graded loans	Number	Percent of graded loans
A-	53,628	60.7	741,568	55.1
B	21,740	24.6	345,768	25.7
C	11,417	12.9	229,850	17.1
D	1,598	1.8	28,999	2.2
Total graded	88,383	100.0	1,346,185	100.0
Other grade	23,750		452,727	

('Other grade' includes largely ungraded subprime loans.)

Table 3 shows the distribution of the MIC subprime loans by paper grade. Loan grades are self-determined and self-reported by the MIC participants. By dollar value, almost half of the subprime loans and over 60 percent of the total excluding the "other grade" category are graded A- *("other grade" generally refers to loans that are not graded)*. A- loans are a lower percentage of loans by number. The difference between the percentage of A- loans by dollar value and by the number of loans reflects the larger average size of A- loans (the average size of A- loans is $72,000, compared to $62,000 for all subprime loans). The percentage of loans in the lowest grades is very low, with about two percent graded D, both by dollar value and number of loans.

One of the key factors that differentiate subprime mortgages from prime mortgages is borrower creditworthiness. Table 4 shows the distribution of credit scores (FICO or FICO equivalent) for the MIC sub-

prime mortgages. Fewer than four percent of the subprime loans have credit scores over 720, as would be expected, since such high scores would normally qualify a borrower for a prime loan. Just over 15 percent of these loans have credit scores between 660 and 720, which would generally be considered moderate to good scores. One-third of the subprime loans have credit scores between 600 and 659, which indicates some problems, while almost another third fall into the range between 540 and 599, which indicates more significant credit impairment. Consistent with the paper grades, there are very few borrowers with extremely low credit scores.

Table 4:
Distribution of Subprime Mortgages by Borrower Credit Score
(Based on $ Volume)

Credit score	Percent
Under 400	0.02
400 to 479	1.1
480 to 519	6.2
520 to 539	7.5
540 to 559	9.9
560 to 579	11.2
580 to 599	11.8
600 to 619	12.1
620 to 639	11.5
640 to 659	9.7
660 to 679	7.2
680 to 699	4.8
700 to 719	3.2
Over 720	3.8

The subprime mortgages in the MIC database have somewhat higher loan-to-value (LTV) ratios than MIC's prime mortgages, but there are no subprime mortgages with LTVs over 90 percent in the database. This factor, in conjunction with the distribution of borrower creditworthiness described previously, indicates that these MIC subprime data exclude much of the bottom end of the subprime market. Hence, these data might not be useful for analyzing the most risky elements of subprime lending—very high LTV and very high credit risk loans. Almost 90 percent of the MIC subprime mortgages are first liens.

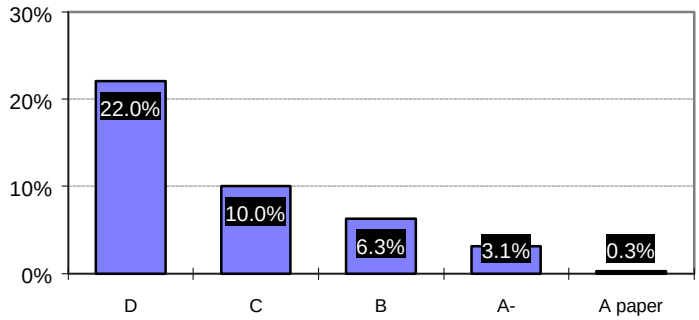
Subprime Mortgage Delinquencies

Regulators are concerned about subprime lending in part because it involves higher credit risk than traditional mortgage lending. While subprime mortgages may have higher default probabilities, they also have higher interest rates, which should compensate for their higher credit risk and administrative costs. Even if their higher interest rates fully compensate lenders for the higher average default rates, subprime mortgages might add to an institution's overall risk if their default rate volatility is high enough or if they raise other concerns such as those relating to operational controls or liquidity.

The MIC data show that subprime mortgages have significantly higher delinquency rates than prime mortgages. Figure 6 shows the seriously

delinquent rates for prime mortgages (A paper) and for A-, B, C, and D subprime mortgages with LTVs under 80 percent. Seriously delinquent rates are the percentages of loans that are over 90 days past due or in

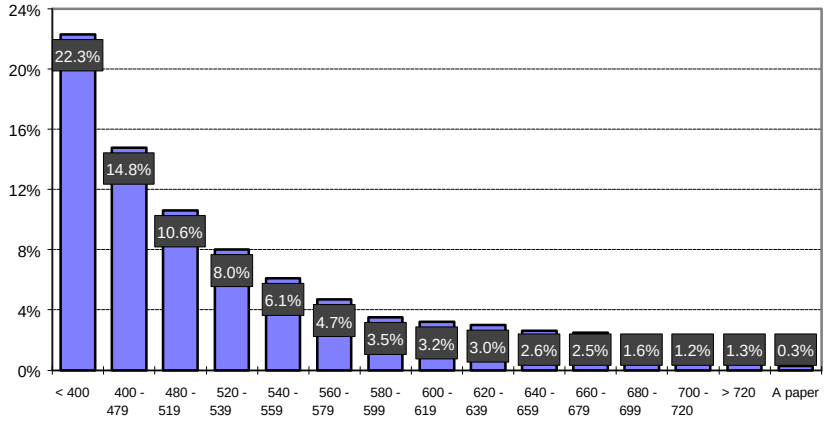
Figure 6: Percent Seriously Delinquent



foreclosure. The delinquency rates increase steadily as grade declines.[2] But even for A- subprime loans, the seriously delinquent rate is more than 10 times that for "A paper" loans with LTVs under 80 percent.

Figure 7 shows subprime mortgage delinquency rates for prime mortgages and for subprime mortgages with LTVs under 80% by credit score. The relationship between credit score and delinquency rates is analogous to that between paper grade and delinquency, with a steady increase as credit score declines.[3]

Figure 7: Percent Seriously Delinquent

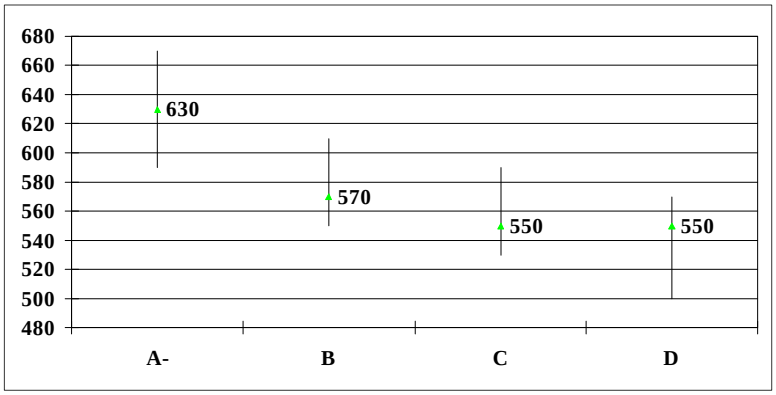


[2]The large jump in delinquency rates between mortgages rated C and D is due to large differences in their foreclosure rates. This may not represent the usual relationship because there are so few D-rated loans (less than $1.5 billion).

[3]The delinquency rate for loans with credit scores under 480 might not be precisely measured because of the small number of loans in this category.

Figures 6 and 7 imply that there is a relationship between paper grade and credit score, but there is considerable variability of credit scores among subprime mortgages in each grade level. The MIC subprime database aggregates credit scores into 20 point ranges. Figure 8 shows the 75th percentile (top of the line), median, and 25th percentile (bottom of the line) of credit scores for each paper grade. For example, it shows that 25 percent of A- subprime mortgages had credit scores below the 580-600 range, 25 percent had credit scores above the 660-680 range, and the median lies in the 620-640 range. MIC does not report credit scores for prime mortgages.

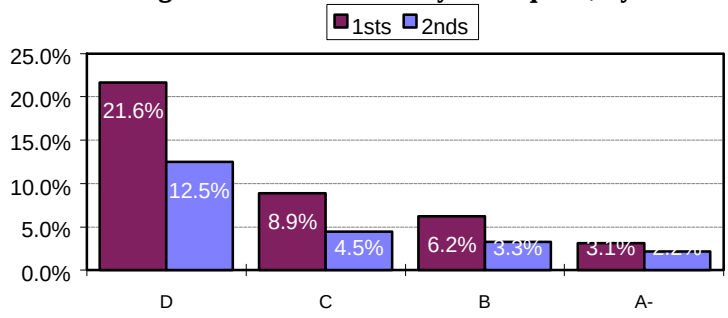
Figure 8: Credit Score Ranges--25th to 75th Percentiles, by Paper Grade, with Median Marked



Anecdotally, a credit score of 680 usually qualifies a borrower for consideration for a prime loan, whereas a score below 620 virtually eliminates that possibility. Forty percent of the MIC subprime loans have credit scores of 620 or higher. About 16 percent of the A- subprime mortgages in the MIC system have credit scores above 680, raising the question of whether these represent at least some potentially prime mortgage borrowers borrowing at subprime interest rates. Because other underwriting factors (not reported by MIC) are used in assessing the risk of a mortgage, we cannot determine whether overpricing exists, but the data certainly raise the issue.

Breaking down the subprime mortgages between first and second liens, Figure 9 shows that first liens have higher delinquency rates than sec-

Figure 9: Percent Seriously Delinquent, by Grade



ond liens. This is a normal trait of subprime mortgage lending, reflecting the fact that some subprime second liens are junior to prime first mortgages. In these cases, the borrowers were able to qualify for prime first mortgages, suggesting that they are better credit risks than those with subprime first mortgages. The MIC subprime data tend to confirm this, since the average credit score for second lien mortgages is higher than the average credit score for first liens.

Subprime Mortgage Interest Rates And Credit Risk

Since higher delinquencies generally yield higher credit losses, subprime loan portfolios are likely to incur larger losses than prime portfolios. But higher losses do not necessarily mean that subprime portfolios are less profitable. The lender's bottom line depends on whether the interest rates charged compensate for the added risk and other administrative costs. All in all, subprime lending should have higher expected profits than prime lending because of its higher risk. The regulatory bottom line may be different from that of the lender, however. Even if the lender is compensated for additional credit risk, subprime lending may increase risk of failure and, therefore, may increase the expected cost to the deposit insurance system.

Figure 10: Average Coupon for Subprime Loans, By Grade

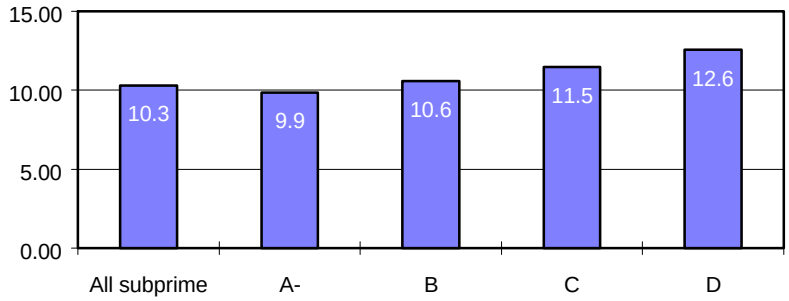


Figure 10 shows the average coupon rate for all (first and second lien) subprime loans originated in 1999, both in the aggregate and broken down by paper grade. As expected, the coupon rates for lower-quality loans are higher than those for the better-quality subprime mortgages.

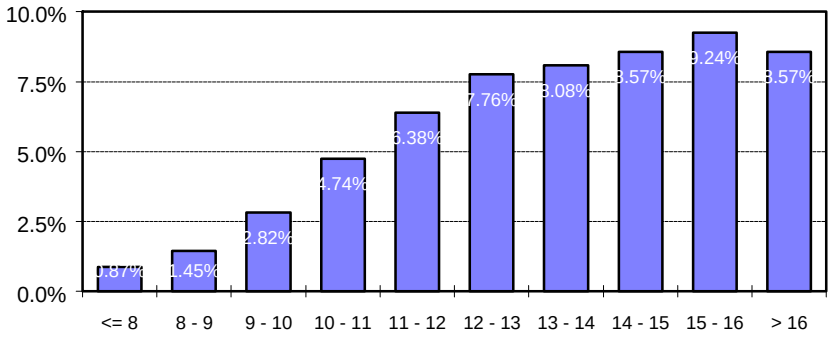
The rate differentials between subprime mortgages of different grades have been stable over the past few years. Table 5 shows the differentials between B, C, and D mortgages and A- mortgages by year of origination. The stability of these differentials may reflect in part both actual market conditions and MIC's effort to use standardized measures of subprime credit quality.

Table 5: Subprime Mortgage Coupon Rate Differentials from A- Mortgages By Origination Year

	B	C	D
1999	0.74	1.62	2.71
1998	0.66	1.48	2.78
1997	0.63	1.49	2.71
1996	0.83	1.75	2.84
1995	1.03	1.80	2.45

One final issue that we look at here is the relationship between coupon rates and delinquency rates for subprime mortgages. Figure 11 shows that delinquency rates increase fairly steadily for subprime loans with higher coupon rates, based on the number of loans. This relationship supports the view that subprime lenders are charging higher rates to riskier borrowers., although the lower delinquency rate at the highest interest rate may give some support to concerns about predatory lending. It is difficult to draw any firm conclusion, though, because there are so few loans in the database with coupons over 16 percent (less than 1 percent).

Figure 11: Seriously Delinquent Rates, by Coupon



CONCLUSION

The growth in subprime mortgage lending means that more credit has been made available to families that had previously faced very limited credit opportunities for buying a home. Technological advances in financial markets have enabled lenders to gather, analyze, and process more and better information. Lenders can now gauge risk and return more efficiently and effectively than ever before. Lenders have developed management systems that effectively increase the likelihood of repayment of these higher risk loans. And most of the evidence from the MIC subprime data is broadly consistent with a well-functioning market. Coupon rates, for example, increase steadily as grade and credit scores decline.

But subprime loans are not simply prime loans with a little more risk. The difference is not just the degree of risk but also the kinds of risk and their complexity. Subprime loans do default more frequently than prime loans. Subprime loans prepay both when interest rates decline and when credit worthiness improves. Prepayment risk is, therefore, greater for subprime loans. Unlike prime mortgages, older subprime mortgages can be riskier because, absent other factors rare in the prime market such as prepayment penalties, they would have been prepaid had the borrower's credit improved. Thus, successful subprime lending requires strong management, effective internal controls, and risk management expertise. Recent subprime lender failures underscore the need

for proper controls and expertise, especially when entering a new and riskier product line.

Predatory pricing has also been raised as an issue in subprime markets. If subprime markets are competitive, the higher interest rates charged by lenders may be appropriate, given the additional credit risk the borrowers pose. But, with effective competition, borrowers will get the lowest rate for which they qualify. The operative term here is competitive markets. And banks and thrifts can play a role in making the subprime market competitive. As OTS Director Seidman noted recently, banks and thrifts that engage in responsible subprime lending offer "the most effective antidote" to predatory pricing.[4]

[4] Speech to Interagency Conference on CRA, San Francisco, April 17, 2000.

Mortgage Market Trends

Volume 4 Issue 1

June 2000

Data Appendix

National and Regional Trends in Mortgage Delinquency Rates

For the Quarter ending:

September 30, 1999

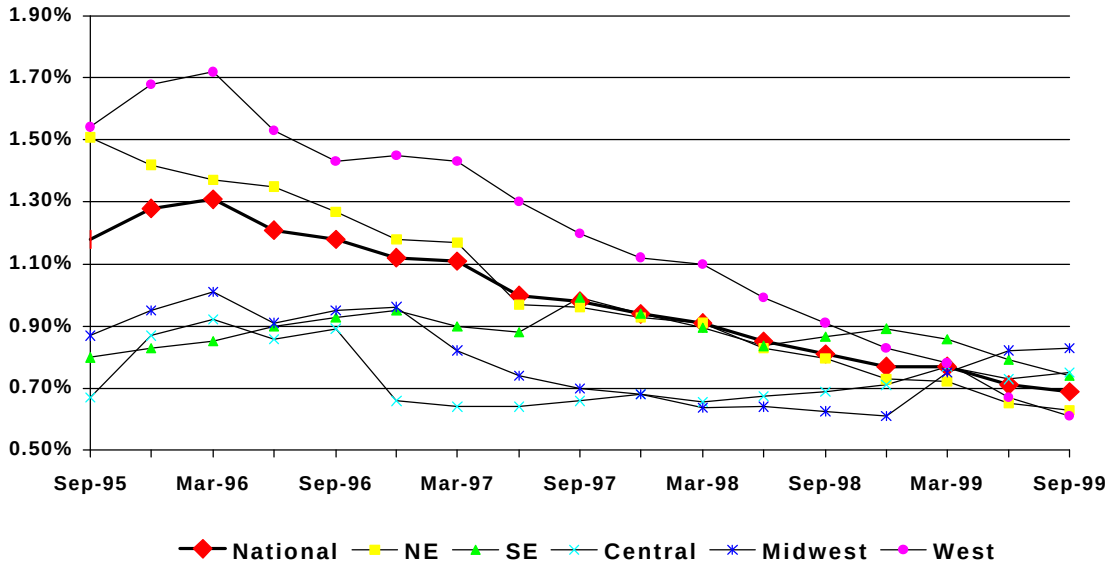
Regional and State Analysis

Seriously Delinquent & Home Price Appreciation Rates as of 9/30/99

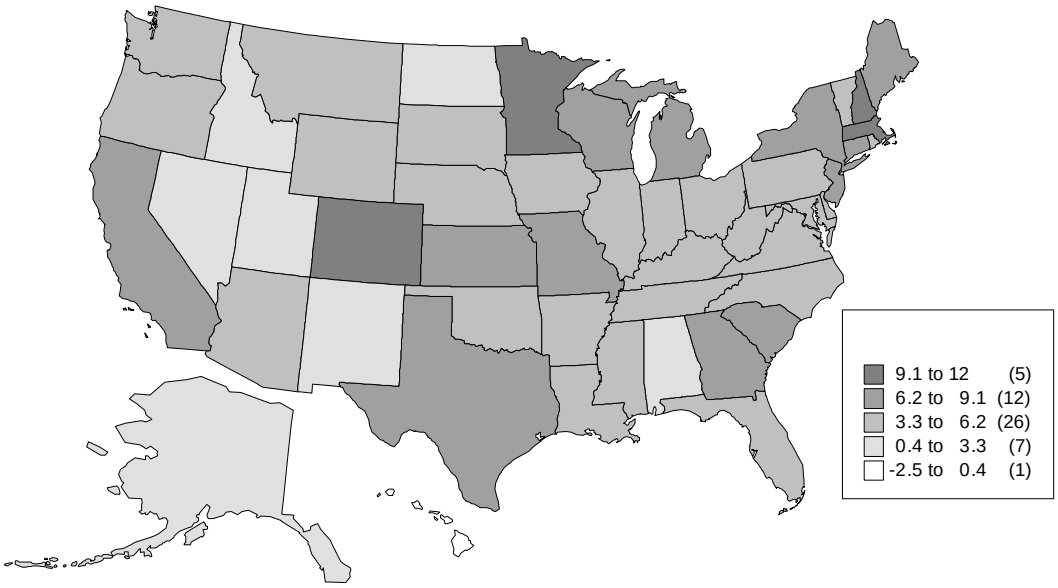
(Based on $)

	MIC SD		TFR SD	Home Price Appreciation	
	Market	Depositories	TFR	1-Year	5-Year
National	**0.74**	**0.95**	**0.69**	**6.1**	**24.1**
Northeast	**0.98**	**1.29**	**0.63**		
Connecticut	0.69	0.87	0.46	6.3	16.4
Delaware	0.81	1.28	0.47	5.0	13.7
Maine	0.55	0.76	0.74	6.8	20.8
Massachusetts	0.38	0.52	0.33	12.0	35.0
New Hampshire	0.28	0.42	0.34	10.2	30.0
New Jersey	1.31	1.89	1.05	6.7	16.8
New York	1.37	1.53	0.58	8.1	17.9
Pennsylvania	0.94	1.41	0.65	3.6	13.4
Rhode Island	0.55	0.69	1.20	4.5	13.0
Vermont	0.34	0.59	0.84	5.5	12.6
West Virginia	0.49	1.34	1.09	4.3	20.5
Southeast	**0.92**	**1.30**	**0.73**		
Alabama	0.67	1.39	1.12	3.3	23.3
DC	1.46	1.80	2.93	10.8	18.2
Florida	1.08	1.29	0.63	4.6	19.9
Georgia	0.75	1.09	0.64	7.4	32.2
Maryland	1.56	2.24	2.16	3.8	11.4
North Carolina	0.55	0.92	0.38	4.9	27.4
Puerto Rico	0.84	*10.34*			
South Carolina	0.64	1.01	0.47	6.8	28.4
Virginia	0.64	0.89	0.28	4.9	15.5
Central	**0.61**	**1.06**	**0.75**		
Illinois	0.87	1.18	0.68	4.9	19.7
Indiana	0.74	1.29	0.85	4.6	25.4
Kentucky	0.47	0.94	0.98	5.5	26.6
Michigan	0.26	0.43	1.23	8.4	43.1
Ohio	0.64	1.20	0.57	5.0	26.5
Tennessee	0.87	1.66	0.75	4.3	27.7
Wisconsin	0.28	0.64	0.27	6.4	26.6
Midwest	**0.49**	**0.77**	**0.93**		
Arkansas	0.75	1.22	4.22	3.3	20.7
Colorado	0.27	0.39	0.13	10.1	39.1
Iowa	0.22	0.31	0.40	5.8	25.9
Kansas	0.40	0.70	0.27	7.3	28.6
Louisiana	0.88	1.37	0.33	5.1	27.2
Minnesota	0.26	0.39	0.30	10.6	35.6
Mississippi	0.67	1.70	1.18	4.7	25.4
Missouri	0.40	0.65	0.42	6.9	25.5
Nebraska	0.19	0.27	0.67	6.0	28.2
New Mexico	0.71	0.93	0.99	2.2	16.5
North Dakota	0.34	0.51	0.34	3.2	22.1
Oklahoma	0.68	1.09	0.17	5.5	22.5
South Dakota	0.36	0.48	0.49	4.5	24.2
Texas	0.66	1.00	1.61	6.3	19.8
West	**0.67**	**0.68**	**0.61**		
Alaska	0.44	1.01	0.07	3.1	17.7
Arizona	0.49	0.61	0.55	5.8	29.2
California	0.70	0.69	0.66	7.1	20.9
Hawaii	1.60	2.26	1.57	-2.4	-13.1
Idaho	0.55	0.57	0.02	2.4	18.5
Montana	0.56	0.95	0.30	5.3	23.9
Nevada	1.08	1.09	1.12	2.1	14.8
Oregon	0.37	0.35	0.20	3.5	34.8
Utah	0.66	0.75	0.74	1.6	36.2
Washington	0.49	0.51	0.24	5.5	26.8
Wyoming	0.38	0.53	0.27	3.7	23.4

OTS Regions
Seriously Delinquent Mortgages (%)
Based on Thrift TFR Data by Location of Headquarters

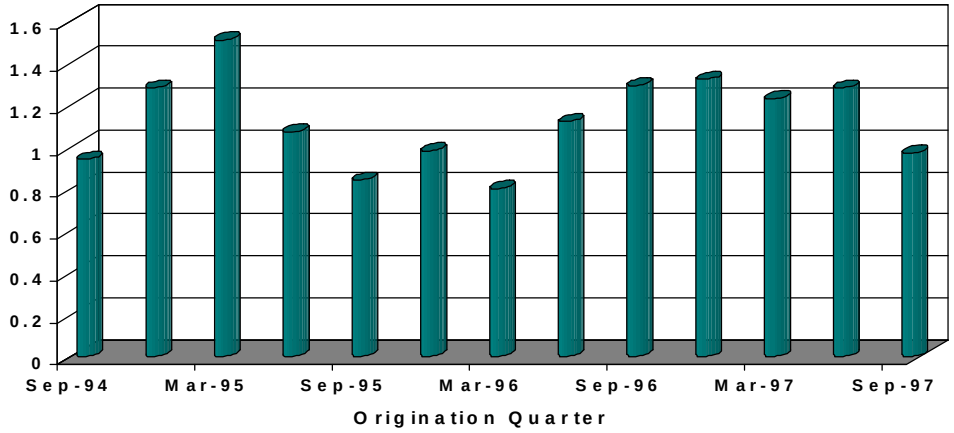


Percent Home Price Appreciation
1998Q3 to 1999Q3
(Source: OFHEO Resale Database)



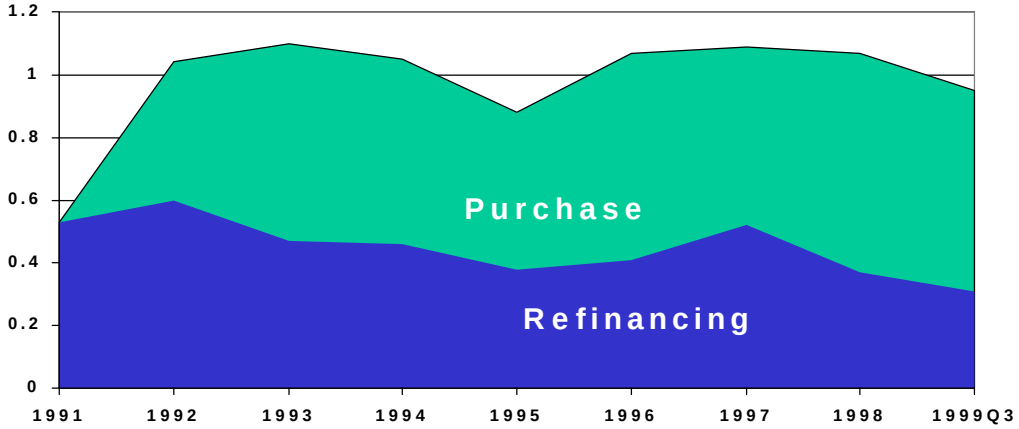
National Cohort Performance by Quarter of Origination

(Source: MIC, Percent Seriously Delinquent after 24 Months, All Loans)



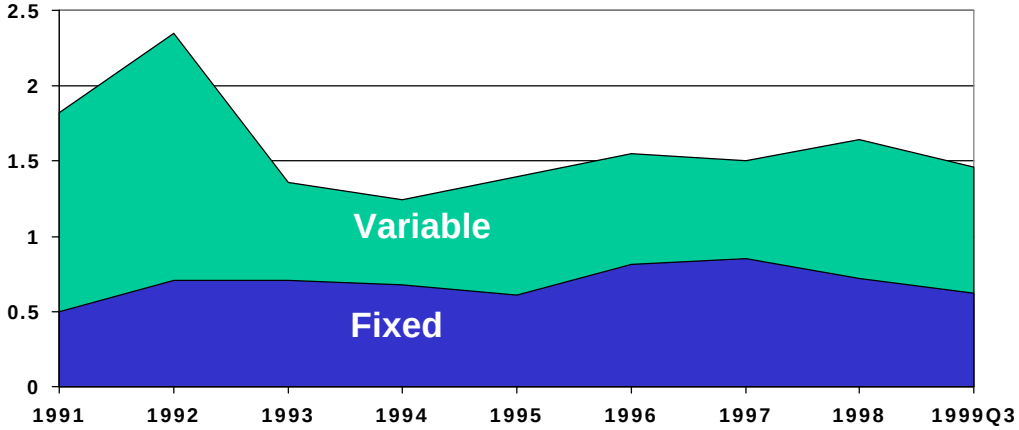
Home Purchase vs. Refinancing Mortgages

(Source: MIC, Percent Seriously Delinquent, All Loans)



Fixed Vs. Variable Rate Mortgages

(Source: MIC, Percent Seriously Delinquent, All Loans)



Mortgage Market Trends

Volume 4 Issue 1

June 2000

Data Appendix

National and Regional Trends in Mortgage Delinquency Rates

For the Quarter ending:

December 31, 1999

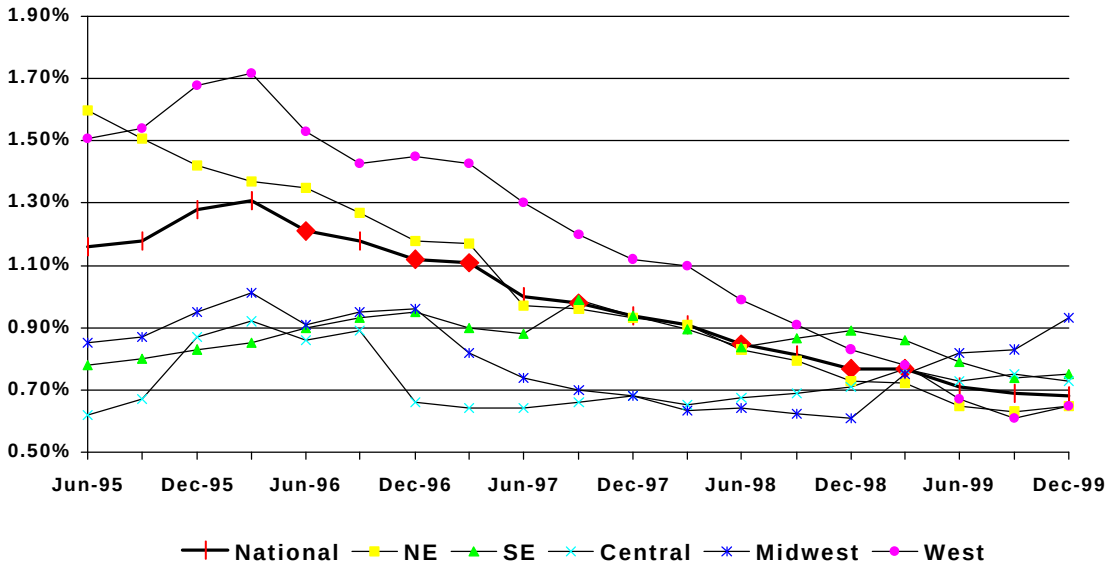
Regional and State Analysis

Seriously Delinquent & Home Price Appreciation Rates as of 12/31/99

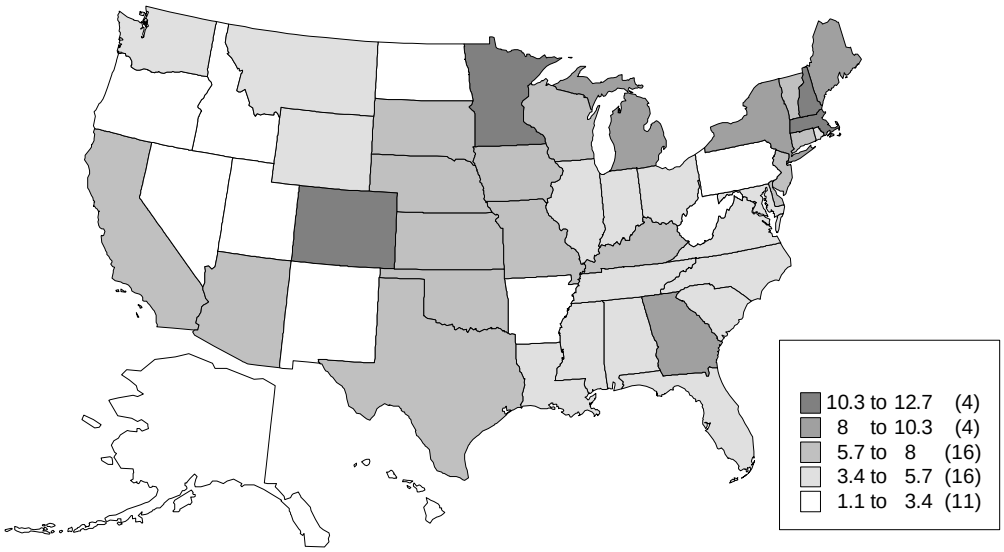
(Based on $)

	MIC SD		TFR SD	Home Price Appreciation	
	Market	Depositories	TFR	1-Year	5-Year
National	**0.86**	**0.93**	**0.68**	6.4	26.1
Northeast	**1.06**	**1.26**	**0.65**		
Connecticut	0.74	0.83	0.42	6.4	19.0
Delaware	0.93	1.19	1.08	6.6	17.7
Maine	0.56	0.72	0.53	8.6	26.3
Massachusetts	0.44	0.49	0.33	12.6	38.6
New Hampshire	0.32	0.31	0.20	10.4	32.8
New Jersey	1.41	1.90	1.07	6.5	19.3
New York	1.46	1.48	0.51	8.1	21.8
Pennsylvania	1.04	1.37	0.68	3.1	15.3
Rhode Island	0.65	0.64	1.08	3.5	14.6
Vermont	0.36	0.43	0.81	7.3	14.2
West Virginia	0.61	1.36	1.03	3.1	22.7
Southeast	**1.10**	**1.29**	**0.75**		
Alabama	0.85	1.45	1.16	3.8	25.2
DC	1.62	1.61	2.91	7.6	23.9
Florida	1.24	1.27	0.71	4.1	21.3
Georgia	0.94	1.10	0.63	8.4	34.8
Maryland	1.81	2.21	2.12	5.0	15.4
North Carolina	0.74	0.98	0.38	5.4	27.7
Puerto Rico	1.00	9.72			
South Carolina	0.77	1.00	0.50	5.4	27.9
Virginia	0.78	0.89	0.27	5.3	17.0
Central	**0.74**	**1.06**	**0.73**		
Illinois	1.00	1.16	0.71	5.2	20.5
Indiana	0.89	1.30	0.85	4.5	26.3
Kentucky	0.57	0.98	1.01	5.8	27.3
Michigan	0.36	0.45	1.18	9.1	43.6
Ohio	0.77	1.25	0.55	5.0	26.8
Tennessee	1.07	1.73	0.70	4.1	28.9
Wisconsin	0.34	0.63	0.25	7.2	27.8
Midwest	**0.60**	**0.75**	**0.71**		
Arkansas	0.84	1.19	4.05	3.1	20.3
Colorado	0.34	0.38	0.16	11.2	41.5
Iowa	0.29	0.32	0.28	6.8	27.3
Kansas	0.50	0.68	0.17	7.7	29.5
Louisiana	1.01	1.46	0.32	5.3	28.6
Minnesota	0.32	0.34	0.23	11.3	37.7
Mississippi	0.80	1.72	1.25	3.8	23.7
Missouri	0.47	0.63	0.44	7.5	26.8
Nebraska	0.25	0.31	0.64	6.9	30.0
New Mexico	0.88	1.05	1.28	2.6	16.5
North Dakota	0.40	0.62	0.36	2.0	20.1
Oklahoma	0.82	1.04	0.18	5.8	24.6
South Dakota	0.42	0.45	0.51	8.0	25.6
Texas	0.84	0.98	0.98	6.5	22.1
West	**0.78**	**0.65**	**0.65**		
Alaska	0.52	1.10	0.14	2.3	18.6
Arizona	0.66	0.63	0.48	6.1	29.3
California	0.79	0.64	0.65	7.7	25.6
Hawaii	1.59	1.96	1.47	3.4	-7.3
Idaho	0.75	0.77	0.05	1.2	16.3
Montana	0.65	0.98	0.24	3.9	23.4
Nevada	1.36	1.19	1.10	1.2	14.6
Oregon	0.51	0.38	0.25	2.9	33.2
Utah	0.92	0.84	0.92	2.0	35.2
Washington	0.61	0.51	0.26	5.5	28.1
Wyoming	0.45	0.51	0.22	3.8	23.0

OTS Regions
Seriously Delinquent Mortgages (%)
Based on Thrift TFR Data by Location of Headquarters

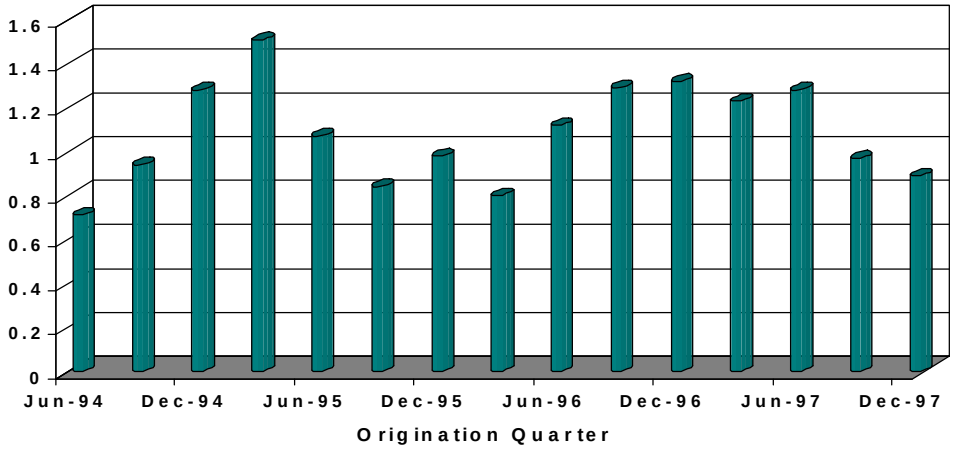


Percent Home Price Appreciation
1998Q4 to 1999Q4
(Source: OFHEO Resale Database)



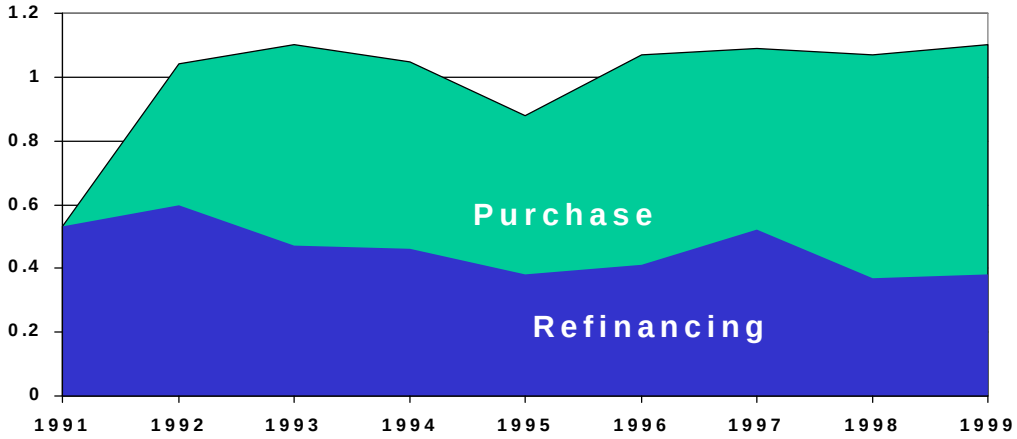
National Cohort Performance by Quarter of Origination

(Source: MIC, Percent Seriously Delinquent after 24 Months, All Loans)



Home Purchase vs. Refinancing Mortgages

(Source: MIC, Percent Seriously Delinquent, All Loans)



Fixed Vs. Variable Rate Mortgages

(Source: MIC, Percent Seriously Delinquent, All Loans)